### NERVOUS FACTORS IN ASTHMA

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# Introduction to Francis M. Rackemann's Paper by Dr. Walter S. Burrage

Dr. Lewis, Members and Guests:

My unscheduled appearance before you this morning imposes upon me a triple responsibility. The first is to tell you why Frank Rackemann cannot be here in person. The second is to bring to you his greetings and the third, at our President's kind request, to read rather than to "ad-lib" Rack's paper in the hope that, in this way, it will better transmit to you what we may describe as Frank's inimitable Racke-manner.

As for his health, or more specifically the lack of it, he has suffered severe low back pain ever since last June. He calls it arthritis. X-rays are interpreted as suggesting "a few gray hairs on the spine". This disorder has hospitalized him intermittently for more than half of the past four months and currently limits his transit to and from bed and chair in his room at the Phillips House of the Massachusetts General Hospital.

His disappointment at being unable to join you today may be classed as maximum, a statement that will be more fully appreciated when I add that, had he been able to make the trip, he estimates that this would have been his fortieth consecutive meeting of the Climatological.

I bring with me his warmest personal regards to all his friends. This I interpret to mean each and every one of you.

Now for his paper: Frank Rackemann speaking.

### NERVOUS FACTORS IN ASTHMA

Progress in asthma has been slow, for several reasons. One is that the exciting cause of the disease is often obscured by complications. Respiratory infections are common, and a simple allergic reaction may be accompanied or followed by a secondary bronchitis which can become even more important than the original attack. The fact is that the number of pure uncomplicated cases where the exciting cause is single and simple—like the family cat, or the pillow, or perhaps ragweed pollen—are few in number. In older people especially whose asthma is intrinsic;

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that is, excited by something which the patient carries within himself, nervous factors play a large role, and that is what this paper is to emphasize.

The diagnosis of the cause of asthma may be difficult. The symptoms which are so easy for the doctor to brush off as "nervous," may depend upon a more defined cause. A doctor friend in his forties, who lived in another city, was having severe asthma. I found him in an oxygen tent with fluids running into his arms and with four doctors standing by. I began: "Joe, are you scared?" He nodded weakly, and I said: "I'm sorry that you are in this awful fix, but you will come out all right. You don't need to worry; you are having good treatment." I dismissed the doctors and just held his hand while I talked softly for a few moments. Downstairs I talked to the doctors: "Gentlemen, I think that if you will take off all these drugs except adrenalin, aminophylline, and potassium iodide (this was before the days of Cortisone), he will be better." On the way home I thought: "Rackemann, you have probably killed him."

Next morning the telephone rang: "What did you do to Joe yester-day?"

I thought, "My God, I did kill him," and asked timidly, "Is he any better?"

"Better!—He's cured."

And so he has been, with no asthma at all since that awful time. For years I have been thinking that this attack was due to a sudden physical and emotional exhaustion in a very active and successful physician, but as I see and read more about drug reactions, it seems quite likely that what I really did for this "Joe" was to cancel the long list of drugs, headed by the barbiturates. The diagnosis of "nervous asthma" must not be made too quickly. It is still possible, however, that my reassurance stopped his anxiety and his fear and re-established his confidence, and so was helpful.

It is not uncommon for asthma to begin at the time of emotional strain. An intelligent, attractive lady of 34 (college graduate) consulted me about her eczema and asthma. She had been happily married and bore a son. All was well. In the war her husband went overseas, but when he came home there was a dreadful change: without any warning he announced that he was going to leave his wife and marry another woman. Within a month the patient developed eczema in the cubital spaces in both arms, and as it increased in severity it spread to other areas. For the next seven years the eczema was present off and on, and there was some asthma with it. There was no relation of the symptoms to a particular season or to a special activity, even if skin tests did show positive reactions to the pollens of grasses and ragweed. She gave no his-

tory of hay fever in the summer. Whenever she could find a job that she liked, the skin did well, but any stress and strain—such as when her small son had measles, or when her job ran out—would make the eczema and the asthma much worse. In hospitals the skin improved. Dr. Stanley Cobb thought that the "nervousness" was due to a paranoid type of schizophrenia. Quite obviously her difficulties were due to emotional rather than physical factors.

Another case was somewhat similar. Mrs. R.W., an attractive, healthy-looking woman of 52, was always well until at age 49 she began to take care of her paraplegic father. After a year she noted a lump in her left breast, and at age 50 the carcinoma was removed. Convalescence was slow. Two years later, at age 52, she developed a tightness in the chest with cough and wheeze. X-ray suggested bronchiectasis. In the hospital she did not do so well. Her asthma became worse instead of better, and one day while the doctors were discussing the case a sudden severe attack developed without warning. It frightened everybody. However, she recovered and did well. The idea of letting her go home for a day or two on three occasions before final discharge was excellent. It reestablished her self-confidence and showed her that she could stay well outside the hospital. For the next two years her own doctor watched her closely, giving injections of ACTH at intervals. After age 55 she was free of asthma and lived to age 71.

Other patients have had asthma after stress and strain. When Mrs. G.A.S. was age 59 her husband was found to have an aneurysm of his aorta. Right away she developed a cough, and later a wheeze. Her husband was operated upon, his aorta was repaired, and he made remarkable recovery. In the six years since then she knows very well that his present good condition can change, and she worries about it. She is "nervous." Meantime, she is always a little wheezy, with rales in the chest. Her teeth are poor with many missing. It is "dangerous" to be content with the diagnosis of "nervous asthma," but regardless of the basic infectious cause, the overlay of apprehension and fear is obvious.

Granted that "everybody is nervous except thee and me," what can be done about it? Treatment of every patient with asthma must include thoughts about the nervous, emotional aspects. Does the patient worry about the outcome? Is she happy? Does she have troubles, frictions and anxieties in addition to the asthma? Then, finally, does she know how to control the symptoms? The treatment must be active and tangible. Our injections under the skin may be "desensitizing," but often they are effective because they impress the patient and show that something real is being done.

Visits to the home of the patient whenever feasible are often worthwhile. Not only can the doctor see the living in general, but in the patient's home, sometimes with a cup of coffee, it is easy to talk. Meantime, one can see whether the place is neat and clean or messy and dirty. One can look at pillows and mattresses. The presence of animals will be obvious. If and when the doctor visits, the family can have no doubt about his interest and his desire to help. As Dr. Francis Peabody¹ wrote, "The secret of the care of the patient is in caring for the patient."

The literature on nervous disease as an important factor in asthma varies in the list of titles. The book "Immunological Diseases," by Max Samter and Harry Alexander,<sup>2</sup> which is standard, says little about nervous factors. A paper by Dubo, Sheldon and others<sup>3</sup> mentions the relation between family history, personal adjustment, and asthma, but not with emphasis. Then one finds other books which deal exclusively with this interesting subject. Michael L. Hirt, of Marquette University School of Medicine, reviews much of the literature in his book, "Psychological and Allergic Aspects of Asthma". A paper by Leigh, Marley and Braithwaite describes the woman who was greatly relieved by four psychiatric interviews and then one morning died suddenly of asthma. The psychic aspects must always be considered, but other factors must not be lost sight of.

In summary:

- 1) The importance of nervous factors in asthma varies widely, from being the whole cause to having no influence.
- 2) After allergy and infection, nervous factors constitute a third group of exciting causes.
- 3) Nervous factors often complicate the allergy or the infection to make a mixed cause.
- 4) Treatment must help the patient to overcome his or her fear of asthma and restore confidence in the ability to get well.
- 5) Details of the treatment include getting to know the patient to help him overcome those problems in life which make the asthma worse. Home visits may be worthwhile.
- 6) Injections to "desensitize" are usually effective, but one wonders if some of them work because they are impressive to the patient.

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